REMARKS

Applicants wish to thank the Examiner for considering the present application. In the Office Action dated August 29, 2007, claims 1-26 are pending in the application. Minor amendments were made to some of the claims. An unsigned §1.131 Affidavit and a Petition Under 37 C.F.R. §1.47(b) to accept the unsigned Affidavit due to unavailable inventors is submitted herewith. Applicants respectfully request the Examiner to reconsider the rejections.

DOUBLE PATENTING REJECTION

Claims 1-26 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-17 of U.S. Pat. No. 6,895,217. Inasmuch as U.S. Pat. No. 6,895,217 is assigned to the same Assignee as the present invention, attached please find a Terminal Disclaimer to Obviate a Double Patenting Rejection over a "Prior" Patent. Therefore, this rejection has been rendered moot.

Rejection Under 35 U.S.C. § 103

Claims 1, 8, 11, 13, 14, 18 and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sherman (U.S. Pat. No. 5,966,371) in view of Dalal (U.S. Pat. No. 6,819,943). Applicants respectfully traverse.

Claim 1 is directed to a communication system (10) that is generally illustrated in Figure 1 and is described on pages 5-7. The communication system (10) (page 5, line 14) includes a stratospheric platform (18) (page 6, line 12 to page 7, line 6) having a payload controller and a phased array antenna (page 8, line 9) having a plurality of elements for generating a first beam and a second beam. A gateway station (20) in communication with said stratospheric platform

(18) receives a first signal having a first beam having interference from the second beam therein and a second signal having a second beam having interference from the first beam therein. As is best shown in Figure 3 and the corresponding text on pages 9-10, the gateway station (20) includes a first subtracting block (74) for subtracting the second signal from the first signal to obtain the first beam and a second subtracting block (76) for subtracting the first signal from the second signal to obtain a second beam. One point to note is that only two signals are received to form two beams (page 9, line 20 to page 10, line 18).

The Examiner cites the Sherman reference for teaching a stratospheric platform in Figure 1. However, Applicants respectfully submit that only a satellite is taught or suggested in the Sherman reference. A stratospheric platform is significantly different than a satellite. Satellites are located hundreds of miles above the earth. A stratospheric platform, as mentioned in the present application on page 6, flies at a significantly lower altitude such as above 60,000 feet. The stratospheric platform may be plane-like and flies in a small radius over a given spot on the earth. Thus, there are significant differences between a stratospheric platform and a satellite.

The Examiner also states that the Sherman reference includes a phase array antenna having a plurality of elements for generating a first beam and a second beam. The Examiner points to Figure 1, reference numerals 12, 13, 17 and 19. However, these reference numerals refer to beams and not to the phased array antenna. Applicants can find no teaching or suggestion for a phased array antenna in the Sherman reference.

The Examiner then states that the Sherman reference does not specifically disclose a gateway station comprising a first subtracting block for subtracting the second signal from the first signal to obtain the first beam, the gateway station comprising a second subtracting block

for subtracting the first signal from the second signal to obtain the second beam. The Applicants agree.

The Examiner then cites the Dalal reference for teaching a gateway station comprising a first subtracting block for subtracting the second signal from the first signal to obtain the first beam.

Applicants have filed a Section 1.131 Affidavit to overcome this rejection since the Dalal reference was filed about two weeks before.

Further, the Dalal reference does not teach or suggest the use of a stratospheric platform. In fact, the words "stratospheric platform" and "phased array antenna" cannot be found anywhere in the Dalal reference. Therefore, even if the references are combined the elements of claim 1 are not found in the combination.

Likewise, claims 8, 11 and 13 depend from claim 1 and are believed to be allowable for the same reasons set forth above.

Claim 14 is a method claim that has steps similar to the elements of claim 1. Therefore, claim 14 is also believed to be allowable for the same reasons set forth above. Claims 18 and 20 are independent claims that are also believed to be allowable for at least the same reasons set forth above with respect to claim 1. Claim 20 also specifically recites user position files. Applicants can find no teaching or suggestion in either of the references for user position files. Furthermore, the Examiner does not state that user position files exist in the Sherman or Dalal references. Therefore, Applicants respectfully submit that claim 20 is also allowable.

Claims 2-4, 15-17, 19 and 21-26 stand rejected under 35 U.S.C §103(a) as being unpatentable over Sherman (U.S. Pat. No. 5,966,371) in view of Dalal (U.S. Pat. No.

6,819,943) and further in view of Baier et al. (U.S. Pat. No. 6,519,477). Applicants respectfully traverse.

Claims 2-4, 15-17, 19 and 21-26 are believed to be allowable for at least the same reasons set forth above with respect to their independent claims. Each of these claims respectfully recites the user position files. The Examiner cites the Baier reference for user position files. The Examiner cites column 8, lines 57-67 of the Baier reference for user position files. Applicants have reviewed this section in conjunction with Figure 4 and can find no teaching or suggestion for user position files or weights that are a function of user position files. The Examiner then states that the user position files are not defined. However, on page 10, lines 12-21 specifically recites that the relative position of the beams may be determined from the user position files. Based on the position of the beams, interference levels may be determined. The position of the beams, therefore, is found in the user position files. Applicants respectfully believe that this definition is clear. The Baier reference clearly does not teach or suggest anything resembling this. Therefore, claims 2-4, 15-17, 19 and 21-26 are believed to be allowable.

Claims 5-7 stand rejected under 35 U.S.C §103(a) as being unpatentable over Ibanez-Meier et al. (U.S. Pat. No. 6,151,308) in view of Kavehrad (U.S. Pat. No. 4,577,330) and further in view of Rouffet et al. (U.S. Pat. No. 5,410,731). Applicants respectfully traverse.

Claims 5-7 recite specific details of the payload controller on the stratospheric platform. The Rouffet reference also does not teach or suggest a phased array antenna and thus the element control signals. Further, it appears that the Examiner has mistyped the references relied upon. The Ibanez-Meier reference and Kavehrad reference are from the previous office action. The Applicants believe that the Examiner meant to reject the claims under Sherman, Dalal and Rouffet.

Claims 9, 10 and 12 stand rejected under 35 U.S.C §103(a) as being unpatentable over Sherman (U.S. Pat. No. 5,966,371) in view of Dalal (U.S. Pat. No. 6,819,943) and further in view of official notice. Applicants respectfully traverse.

Claims 9, 10 and 12 ultimately depend from claim 1 and recite further limitations. As mentioned above, the Dalal reference should be removed as a reference and even if it is not, the Dalal reference does not teach or suggest a stratospheric platform. Therefore, Applicants respectfully request the Examiner to reconsider the rejection of claims 9, 10 and 12.

CONCLUSION

In light of the above remarks, Applicants submit that all rejections are now overcome. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited. Should the Examiner have any questions or comments which would place the application in better condition for allowance, he is respectfully requested to call the undersigned attorney.

Should any fees be associated with this submission, please charge Deposit Account 50-0383.

Respectfully submitted,

Dated:

11/29/07

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